

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A tolerance ring comprising a an annular band of resilient material having:

a plurality of corrugated protrusions formed therein, all of the protrusions extending radially in a common radial direction away outwards between from an unformed annular portion portions of the band, wherein the corrugated protrusions form a protrusions load bearing area for contracting an outer component and the unformed annular portions form that is smaller than an unformed annular portion load bearing area for contacting an inner component of the unformed annular portion that is configured to distribute a load from the protrusions load bearing area over a portion of a first the inner component that is to be engaged with the unformed annular portion; and

a guide portion contiguous with, and extending axially from the an endmost unformed annular portion of the band, wherein the guide portion comprises at least one guide surface that is contiguous with the unformed annular portion load bearing area and is inclined relative to the axis of the band in the same radial direction of as the corrugated protrusions to flare outwards from the unformed annular portion load bearing area such that a free end of the guide portion defines an opening of a size other larger than that defined by the unformed annular portion portions of the band to facilitate alignment between the unformed annular portion portions and the first inner component when the first inner component is slid against inserted into the unformed annular region portion load bearing area.

2. (Original) A tolerance ring according to claim 1, wherein the angle of inclination of the at least one guide surface relative to said axis is constant along the length of the guide surface.

3. (Previously presented) A tolerance ring according to claim 1, wherein the guide portion extends from the whole circumference of the band.

4. (Withdrawn) An apparatus comprising:
a housing having a bore therein,

a shaft in the bore, and

a tolerance ring according to any one of the preceding claims in which all of the protrusions extend radially outwards from the unformed annular portion of the band to engage the bore of the housing, the shaft comprising the first component and being received in the band and engaging the unformed annular portion of the band.

5. (Withdrawn) An apparatus comprising: a housing having a bore therein, a shaft in the bore, and a tolerance ring according to any one of the preceding claims in which the protrusions extend radially inwards from the band, the protrusions engaging the shaft and the band engaging the walls of the bore.

6. (Withdrawn) A method of assembling an apparatus comprising:
inserting a tolerance ring according to claim 1 in a bore in a housing, all of the protrusions of the tolerance ring extending radially outward from the unformed annular portion of the band, the protrusions engaging the wall of the bore when the tolerance ring is inserted into the bore;

inserting an end of a shaft into the guide portion of the tolerance ring, wherein the shaft comprises the first component; and

moving the shaft along the axis of the band into the band, so that the unformed annular portion of the band engages the shaft.

7. (Withdrawn) A method of assembling an apparatus, comprising: mounting a tolerance ring according to claim 1 on a shaft, the protrusion of the tolerance ring extending radially inward to engage the shaft ; inserting the guide portion of the tolerance ring into a bore in a housing; and moving the shaft and tolerance ring axially into the bore such that the band engages the wall of the bore.

8. (Previously presented) A tolerance ring according to claim 2, wherein the guide portion extends from the whole circumference of the band.

9. (Withdrawn) A method of assembling an apparatus comprising:

inserting a tolerance ring according to claim 2 in a bore in a housing, all of the protrusions of the tolerance ring extending radially outward from the unformed annular portion of the band, the protrusions engaging the wall of the bore when the tolerance ring is inserted into the bore;

inserting an end of a shaft into the guide portion of the tolerance ring, wherein the shaft comprises the first component; and

moving the shaft along the axis of the band into the band, so that the unformed annular portion of the band engages the shaft.

10. (Withdrawn) A method of assembling an apparatus comprising:

inserting a tolerance ring according to claim 3 in a bore in a housing, all of the protrusions of the tolerance ring extending radially outward from the unformed annular portion of the band, the protrusions engaging the wall of the bore when the tolerance ring is inserted into the bore;

inserting an end of a shaft into the guide portion of the tolerance ring, wherein the shaft comprises the first component; and

moving the shaft along the axis of the band into the band, so that the unformed annular portion of the band engages the shaft.

11. (Withdrawn) A method of assembling an apparatus, comprising: mounting a tolerance ring according to claim 2 on a shaft, the protrusion of the tolerance ring extending radially inward to engage the shaft; inserting the guide portion of the tolerance ring into a bore in a housing; and moving the shaft and tolerance ring axially into the bore such that the band engages the wall of the bore.

12. (Withdrawn) A method of assembling an apparatus, comprising: mounting a tolerance ring according to claim 3 on a shaft, the protrusion of the tolerance ring extending radially inward to engage the shaft; inserting the guide portion of the tolerance ring into a bore in a housing; and moving the shaft and tolerance ring axially into the bore such that the band engages the wall of the bore.

13. (Currently amended) The tolerance ring of claim 1, wherein the guide portion is sufficiently smooth to prevent the production of particles when the guide portion slides against the ~~first~~ inner component.

14. (Previously presented) The tolerance ring of claim 1, wherein the unformed annular portion load bearing area is sufficiently sized to prevent torque ripple.

15. (Cancelled)

16. (Previously presented) The tolerance ring of claim 1, wherein the band is formed from a strip of resilient material curved into a substantially annular shape with a gap between ends of the strip.

17. – 20. (Cancelled)

21. (New) A tolerance ring for a hard disk drive pivot mount, the tolerance ring comprising:

an annular band of resilient material having an innermost surface defined by a plurality of unformed annular portions and an outermost surface defined by a plurality of radial protrusions formed in the band, each protrusion extending radially outwards between a pair of unformed annular portions; and

a guide portion at one end of the band, the guide portion being contiguous with and extending axially from an endmost unformed annular portion, and comprising a guide surface which is contiguous with and flares outwardly from the innermost surface.